

REMARKS

Review and reconsideration of the application in view of Applicants' amendments and remarks are respectfully requested. No claims are amended.

Consideration of the amendment and remarks after final is proper under 37 C.F.R. §1.116 because 1) no claims are amended; 2) the remarks clarify issues previously presented; and 3) the remarks place the application in condition for allowance. Entry and consideration of the remarks is thus respectfully solicited.

Applicants thank Examiner Shosho for consideration and acknowledgement of the Information Disclosure Statement and Form PTO-1449 filed October 20, 2003. Applicants further thank Examiner Shosho for the telephone conference of February 24, 2004, with Applicants' representative. In the telephone conference, a proposed claim amendment was discussed and dismissed, and Applicants indicated they would likely file a Declaration in support of their argument. However, on review of the claims and specification, Applicants do not feel a Declaration is warranted at this time, as the claims and specification supply all necessary information to refute the rejections asserted.

Claims 1, 10, 12, 14, and 17-18 have been rejected under 35 USC §103(a) as being unpatentable over Sacripante et al. (US 6,025,412) in view of Figuly (US 5,136,014).

Claim 13 has been rejected under 35 USC §103(a) as being unpatentable over Sacripante et al. in view of Figuly as applied to Claims 1, 10, 12, 14 and 17-18 above, and further in view of *Polymer Science Dictionary*.

Claim 15 has been rejected under 35 USC §103(a) as being unpatentable over Sacripante et al. in view of Figuly as applied to Claims 1, 10, 12, 14 and 17-18 above, and further in view of Evans et al. (US 6,468,338).

Claim 16 has been rejected under 35 USC §103(a) as being unpatentable over Sacripante et al. in view of Figuly as applied to Claims 1, 10, 12, 14 and 17-18 above, and further in view of either Chen et al. (US 6,431,700) or Evans et al. (US 6,001,161).

Applicants respectfully traverse each and every one of the above rejections for at least the following reasons.

The Office Action relies on the primary combination of Sacripante in view of Figuly in all four of the stated rejections. This combination of references will be addressed first, and individual tertiary references addressed afterwards.

According to the Office Action, Sacripante et al. discloses an ink jet ink comprising water, a humectant, and a polyester having a dye attached within the base chain or to the base chain as a side chain component. As admitted in the Office Action, Sacripante et al. does not disclose or suggest a hyperbranched polymeric dye. Figuly is cited for disclosure of a hyperbranched polyester. Neither Sacripante et al. nor Figuly disclose or suggest the subject matter of the claimed invention.

Sacripante et al. is directed to an ink jet ink including particles of a dye-polymer resin dispersed in a liquid vehicle. The dye-polymer resin particles have a number average particle size of from about 2 nm to about 500 nm, and include a dye chemically attached to a polymer resin. Figuly is directed to hyperbranched functional polyesters that can be used as rheology modifiers. One of ordinary skill in the art would not look to Sacripante et al. to form the claimed invention because Sacripante et al. is directed to formation of particles of a dye-polymer resin. Combining Figuly with Sacripante et al. would result in the formation of particles of dye-polymer resin, wherein the resin is a hyperbranched polymer.

The claimed invention does not include particles. As stated in the specification at page 2, lines 19-20, traditional dye-based inks do not contain particles observable under a microscope. Applicants submit their dye is "traditional" in the sense of not including particles. A review of the specification reveals a lack of particle size, and a description of the dye in terms of molecular weight and percent by weight in the ink jet ink composition (see page 9, lines 3-6). In contrast, Sacripante specifically states the dye-polymer resin forms particles. Combining Sacripante with Figuly must result in particles of dye-polymer resin, or the purpose of Sacripante would not be met. Because Sacripante, alone or in combination with Figuly, requires particles, it does not

disclose or suggest the claimed invention, wherein the dye is not visible under a microscope.

Further, the combination of Sacripante et al. with Figuly, producing particles of dye-polymer resin, would not be desirable in the claimed invention because particles do not allow reliable firing of the ink jet ink composition. Particles can cause clogging and uneven dispersion of the ink jet ink composition. See, for example, the description of pigment particles in Applicants' specification at page 2, lines 24-29. Thus, combining the teachings of Sacripante et al. with Figuly would result in an ink jet ink including pigment particles which would impair the firability of the ink.

As discussed herein, neither Sacripante nor Figuly, alone or in combination, disclose an ink jet ink composition comprising a hyperbranched dye, wherein a dye is not visible under a microscope. The disclosures of the Polymer Science Dictionary, Evans et al. '338, Chen et al., and Evans et al. '161 do not overcome the deficiencies of Sacripante et al. or Figuly, alone or in any combination. For at least the above reasons, reconsideration and withdrawal of the rejection are respectfully requested.

Claim 11 has been objected to as being dependent upon a rejected base claim, but otherwise is indicated to include allowable subject matter. Applicants submit all of claims 1 and 10-18 are in condition for allowance for at least the reasons set forth herein. Prompt and favorable action is earnestly solicited.

Should the Examiner require anything further, or have any questions, she is invited to contact Applicants' undersigned representative.

Respectfully submitted,



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